

I-5 – South 317th Street HOV Direct Access Project Update

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Construction Update

Crews continue working on wall panels for the second bridge support, to the right of the temporary roadway at S. 317th. Just north of this second bridge support, we've also begun construction on another retaining wall. (See photo at http://www.wsdot.wa.gov/Projects/I5/S317th_DirectAccess/photos/dec04.html).

Other continuing work includes:

- Excavating and grading the southbound lanes near S. 317th
- Constructing the retaining wall north of the first bridge support
- Excavating for the pond near the S. 320th southbound exit ramp
- Installing drainage systems on the west side of I-5
- Upgrading the electrical system in the project area

South 317th Street Bridge Girders

What's about eight car lengths long, weighs about as much as 50 cars, and costs about as much as a luxury car? One of the girders for the new bridge that will connect I-5 carpool lanes to the new Federal Way Transit Center.

While project crews are hard at work constructing bridge supports, workers at Concrete Technology Corporation in Tacoma are fabricating the girders that will be set on top of the supports. **Four girders** will span the southbound lanes of I-5 at S. 317th Street. Each one is **128 feet long**, weighs approximately **200,000 pounds** (100 tons), and costs about **\$50,000**. Each girder will be delivered to the job site in two pieces.

Crews will install the girders using a process called "**post tensioning**." The concrete girders have conduits (tubes) running through them. In the conduits crews insert bundles of steel wires, stranded cable, or solid steel rods. This is called a "tendon." On one end of the bridge, the tendon is connected to an anchor. At the other end of the bridge, a hydraulic jack pulls the tendon until it reaches a required force. This holds the bridge girders together and strengthens them.

We expect to set the girders in place in **January**. We'll need to close the southbound I-5 exit ramp at S. 320th Street for up to five nights, but we'll be able to keep all lanes of southbound I-5 open on the temporary roadway. Stay tuned to this weekly e-mail update and to AM 1520 on your radio in the project area for information on these upcoming operations.

Highway Advisory Radio Updates

Make sure you catch our latest weekly radio message on **AM 1520** in Federal Way. Questions or comments? E-mail Laura Johnson at JohnsoL@wsdot.wa.gov.
